## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 23 December 2004 (23.12.2004)

**PCT** 

## (10) International Publication Number WO 2004/111034 A1

(51) International Patent Classification7:

C07D 401/12

(21) International Application Number:

PCT/SE2004/000970

(22) International Filing Date:

16 June 2004 (16.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0314057.1

18 June 2003 (18.06,2003) GF

(71) Applicant (for all designated States except US): AS-TRAZENECA AB [SI9SII]; S-151 85 Södertälje (SE).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): CHENG, Leifeng [GB/SE]; Astra/eneca R & D Mölndal, S-431 83 Mölndal (SE).
- (74) Agent: ASTRAZENECA; Global Intellectual Property, S-151 85 Södertälje (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): Ali, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GII, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PI, PT, RO, SE, SI, SK, TR), OAPI (BE, BJ, CE, CG, CI, CM, GA, GN, GQ,

## Declaration under Rule 4.17:

GW, ML, MR, NE, SN, TD, TG).

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE. AG, AI., AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG. ES. FI, GB. GD. GE. GH. GM. HR. HU. ID. IL. IN. IS. JP. KE. KG. KP. KR. KZ. LC. LK. LR. LS. LT. LU. LY. MA. MD. MG. MK. MN. MW. MX. MZ. NA. NI. NO. NZ. OM. PG, PH. PL. PT. RO. RU. SC. SD. SE, SG, SK, SL, SY, TJ, TM. TN. TR. TT. TZ. UA. UG. UZ. VC. VN. YU. ZA. ZM. ZW. ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD. SL. SZ. TZ. UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC: NL, PL, PT, RO, SE, SI, SK, TR). OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, MI, MR, NE, SN, TD, TG):

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 3-SUBSTITUTED 5,6-DIARYL-PYRAZINE-2-CARBOXAMIDE AND -2-SULFONAMIDE DERIVATIVES AS CBI MODULATORS

(57) Abstract: The present invention relates to 3-substituted-5,6-diarylpyrazine-2-carboxamide and -2-sulfonamide derivatives and processes for preparing such compounds, their use in the treatment of obesity, psychiatric and neurological disorders, to methods for their therapeutic use and to pharmaceutical compositions containing them. The compounds are cannabinoid receptor 1 (CB1) modulators.

1111034 A1